## ABSTRACT

A scanning system is calibrated to correct for possible panel misalignments errors. A reference slide or data point is used to obtain a series of measurements with the scanning system. These measurements are compared with the expected results to determine systematic alignment errors in the scanning system. A model is created to correct the alignment errors during the scanning process, thus providing a plurality of more accurate scans. The plurality of scans may then be assembled to create a complete image of the scan area.